Appendix A

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IFFE BINGAMAN, New Morkey, Chairman

DANTEL K. AUAKA, Havasi BYRON L. DORGAM, North Dakota BOB GRAHAM, Foolds RON WYDEN, Guspon TIM JOHNSON, South Dalota MARY L. LANDRIEU, Louisiano EVAN BAYH, Indiana DIANNE FEINSTEIN, Calfornia CHARLES E. SCHAMER, New York MARIAK CANTIVELL, Washington TICHARLES E. CARDES Dalawaria FRANK H. MURKOWSKI, Abscha PETE V. DOMENNO, New Mousto DON MCRLES Officiations LURRY E. CHAIC, Most EN MICHTHORISE CAMPBELL, Colorade CHAIG THOMAS, Wyorking ROJAYO E. SHEED, Abschana CONRAD BURNS, Moritana JON KYL, Artison CHUOX HAGEL, Februsha GORDON SIRTH, Origan

ROBERT M. SIMON, STAFF DIRECTOR
SAME, FOWLER, CHIEF COUNSEL.
BRIAN P. MALNAK, REPUBLICAN STAFF DIRECTOR
MALES P. BEIRNE REPUBLICAN CHIEF COUNSEL.

United States Senate

COMMITTEE ON ENERGY AND NATURAL RESOURCES

WASHINGTON, DC 20510-6150

ENERGY.SENATE.GOV

December 20, 2001

Dr. Mary Hutzler Acting Administrator Energy Information Administration 1000 Independence Avenue, SW Washington, DC, 20585

Dear Acting Administrator Hutzler:

The Senate is considering comprehensive legislation to update U.S. national energy strategy in light of the volatility of energy markets in calendar year 2000 and the growing energy security concerns in light of recent events that highlight our dependence on foreign imported oil. To this end, there have been several legislative proposals introduced in the 107th Congress on the subject of national energy policy, and the Majority Leader has indicated that the Senate will debate energy policy early in the next session of Congress. Our decisions will benefit from an analysis of the strengths and weaknesses of the various energy policy proposals that have been introduced to date.

With that in mind, I request that the Energy Information Administration (EIA) analyze the potential costs and benefits of proposed legislation to update and revise our national energy strategy, namely, H.R. 4 as passed by the House of Representatives in August 2001, and S. 1766 as proposed by Senators Daschle and Bingaman earlier this month. I understand that EIA has the ability to conduct such analysis, including the use of both sectoral and economy-wide energy models. Using the most recent *Annual Energy Outlook 2002* as a reference case, I ask that EIA assess the impacts of these energy policy proposals on, at minimum:

- macroeconomic indicators (jobs, Gross Domestic Product, trade balance, etc.);
- energy supply and demand by fuel and process;
- energy prices to consumers (residential, industrial, and commercial) by fuel;
- dependence on foreign oil imports and impacts on energy security;
- · impacts on energy infrastructure (transmission, pipelines, refineries, etc.); and
- emissions of greenhouse gases and air pollutants.

Murkowski: Hutzler December 20, 2001 Page 2 of 2

As the Daschle/Bingaman bill (S. 1766) contains several "placeholders" reserved for future legislative proposals, I ask that for the purposes of your analysis, you include for Section 801 of S. 1766, S. 804, introduced by Senators Feinstein, Snowe and Reed making changes to the Corporate Average Fuel Economy (CAFE) program. For Section 1821 of S. 1766, use the provisions contained in S. 1746, introduced by Senator Reid on nuclear facility security. Also, to ensure a consistent comparison, please exclude from your analysis of H.R. 4 the amendments to the tax code contained in Division C of that bill. I expect to request from EIA a follow-up analysis of the tax-related proposals contained in H.R. 4 and an expected Senate Finance Committee mark at a subsequent date.

When assessing the costs and benefits of these legislative proposals, please be sure to point out which specific policy actions have the most significant positive or negative impacts on the factors outlined above. In order to inform our deliberations on national energy policy which are due to begin in the next several weeks, I ask that the requested information be made available by January 23, 2002. In addition, I request that a briefing of your results prior to release of any written report.

If you have any questions regarding this request, or desire further clarification with respect to translating legislative proposals into assumptions you will use in your analysis, please contact Bryan Hannegan with my Senate Energy and Natural Resources Committee staff at 224-7932. Thank you for your timely attention to this request, and for your efforts to ensure that our Nation's energy policy decisions are informed with the best available analysis.

Sincerely,

Frank H. Murkowski Ranking Member

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ROBERT M. SIMON, STAFF DIRECTOR SAME FOWLER, CHIEF COUNSEL STAM P. MALMAK, REPUBLICAN STAFF DIRECTOR

United States Senate

COMMITTEE ON ENERGY AND NATURAL RESOURCES WASHINGTON, DC 20510-6150

ENERGY.SENATE.GOV

February 6, 2002

Dr. Mary Hutzler Acting Administrator Energy Information Administration 1000 Independence Avenue, SW Washington, DC, 20585

Dear Acting Administrator Hutzler:

As a follow-up to my letter of December 20, 2001 in reference to analysis of comprehensive energy legislation, please find below additional information to assist you in your analysis of key portions of S. 1766 and H.R. 4 identified as follows:

Renewable Portfolio Standard (RPS): For H.R. 4, assume no changes in current law. For S. 1766, assume a 2.5% mandate for new renewable electricity starting in 2005, increasing 0.5% each year through 2020 (10% new renewables by 2020). In addition, please provide analysis of a new scenario that reflects a 20% RPS by 2020 under the same provisions as in S. 1766. Key analysis questions include: whether or not such amounts of new renewable energy are possible with reasonable technology improvements, what renewable technologies benefit most, whether consumer retail electricity costs are affected by the RPS, and how the higher incremental costs of renewable electricity generation are absorbed by generators, utilities and/or consumers. Also, please describe the effect of the civil penalty imposed for failing to meet the RPS and whether that affects estimates of renewable electricity production, economic impacts, and macroeconomic effects.

Alaska Oil Production: For S. 1766, please provide your baseline Annual Energy Outlook 2002 (AEO) forecast without production from ANWR and compare it with several scenarios for H.R. 4: (1) median USGS ANWR production estimate and AEO 2002 world oil prices; (2) high-range USGS ANWR production estimate and AEO 2002 world oil prices; (3) high-range USGS estimate, using your "High Oil Price" side case; and (4) high-range USGS estimate, using your AEO 2002 "High Technology" side case that assumes rapid transportation technology development. Key variables to consider include the percentage of U.S. foreign oil dependence, and a summary of crude oil supply, demand, and disposition.

Murkowski: Hutzler February 6, 2002 Page 2 of 3

Alaska Natural Gas: For H.R. 4, assume no changes in law. For S. 1766, please analyze the impact of the proposed \$10 billion loan guarantee (Sec. 6501-6512) on project economics and timing of construction assuming that the "over the top" route for the pipeline is prohibited (Sec. 701). Key analysis variables should include: the date at which natural gas from Alaska is first delivered to market in the Lower 48, the impact of the pipeline on the price of natural gas, and the sensitivity of these variables to higher or lower natural gas prices in the U.S. market.

Automobile Fuel Economy Standards (CAFE): For H.R. 4, assume increases in CAFE standards for model years 2004 through 2010 so as to decrease total gasoline consumption by 5 billion gallons over that period of time. For S. 1766, assume the adoption of provisions of S. 804 (Feinstein) – require 25 mpg for SUVs and light trucks produced between model years 2005 and 2007 and 27.5 mpg for SUVs and light trucks produced thereafter. Use as a reference case technology frozen at model year 2002 levels and performance, and assume further no change in fuel economy for passenger vehicles. Please analyze a second case which assumes a 5% increase in fuel economy standards over model year 2000 levels by model year 2005 for both passenger vehicles and SUVs/light trucks, with a further 5% increase for all vehicles by model year 2010. In all cases, please provide analysis on total net costs to consumers (e.g. up-front additional costs minus life-cycle fuel economy savings), macroeconomic effects on non-agricultural jobs, whether such fuel economy goals can be meet through reasonable technology assumptions, and estimates of carbon dioxide emissions.

Renewable Fuels/MTBE: For H.R. 4, assume no change in current law, and use the Annual Energy Outlook 2002 reference forecast as the base case. For S. 1766, assume a renewable fuel standard of 2.3 billion gallons renewable fuel by 2004 increasing per Section 818 of the legislation to 5.0 billion gallons by 2012. Include in your analysis of S. 1766 a ban on MTBE within four years and assume that, given the opportunity to opt out of the 2% oxygenate requirement, California RFG and East Coast RFG areas do so. Also, please analyze a third case where the renewable fuel standard is as proposed in Section 818 of S. 1766, but assume complete repeal of the 2% oxygenate standard, and that States are given the ability to ban MTBE if they wish starting in 2003 or 2004. Key analysis variables should include effects on motor gasoline and RFG prices and fuel imports, GDP, and energy expenses, and estimates of carbon dioxide emissions.

Air Conditioning/Heat Pump Standard: For H.R. 4, assume a 12 SEER/7.4 HSPF standard for air conditioners and heat pumps manufactured for Federal agency use only on or after date of enactment, and for S. 1766 assume a 13 SEER/7.7 HSPF standard enacted for all air conditioners and heat pumps manufactured on or after January 23, 2006. Key analysis variables include: electricity savings, net energy cost savings (increased up-front stock cost minus life cycle energy bill savings), and carbon dioxide emissions evaluated relative to the current 10 SEER standard.

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Other Provisions: Pursuant to my letter of December 20, 2001, please also provide qualitative analyses for the following provisions:

Price-Anderson Act

S. 1766 (Sec 501-508) and H.R. 2983

Energy R& D

S. 1766 (Sec. 1211-1245)

H.R. 4 (Corresponding provisions in Division B)

Other Consumer Product Standards

S. 1766 (Sec. 921- 929) H.R. 4 (Sec. 142-143)

Alternative Fuel Programs

S. 1766 (Sec. 811, 812, 814-819)

H.R. 4 (Corresponding provisions in divisions A,B)

Hydro Relicensing

S. 1766 (Sec 301-308)

H.R. 4 (Sec. 401-402)

Pursuant to your conversations with my Energy Committee staff, I understand that your analysis will be issued in phases once available, starting with the Air Conditioning/Heat Pump Standard analysis delivered to me on January 23, 2002. As the Senate appears to be moving towards consideration of S. 1766 during the week of February 11th, I hope you can deliver as many of these phases as you and your staff are able to complete prior to that time and brief interested staff and Senators as appropriate at the earliest opportunity.

If you have any further questions regarding this request, or desire further clarification, please contact Bryan Hannegan with my Senate Energy and Natural Resources Committee staff at 224-7932. Thank you for your continued timely attention to this request, and for your efforts to ensure that our Nation's energy policy decisions are informed with the best available analysis.

Sincerely,

Frank H. Murkowski Ranking Member

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----Original Message----

From: Bryan_Hannegan@energy.senate.gov [mailto:Bryan_Hannegan@energy.senate.gov] Sent: Thursday, February 21, 2002 4:37 PM

To: Hutzler; Mary

Subject: CAFE Provisions in S. 517

Mary -- per our phone discussion earlier today, attached is the revised Sec. 801

of the Daschle/Bingaman energy bill (S. 1766, now S. 517) that we would like EIA

to analyze as part of our December 20, 2001 request for analysis of the bill. You are welcome to use this email as documentation of our request in lieu of a

formal letter.

Bryan Hannegan, Staff Scientist Committee on Energy and Natural Resources United States Senate

- SEC. 801. AVERAGE FUEL ECONOMY STANDARDS FOR PASSENGER AUTOMOBILES AND LIGHT TRUCKS.
- (a) INCREASED STANDARDS.- Section 32902 of title 49, United States Code,

is amended-

- (1) by striking "Non-Passenger Automobiles.- " in subsection (a) and inserting "Prescription of Standards by Regulation.- "; and
- (2) by striking "(except passenger automobiles)"in subsection (a) and inserting "(except passenger automobiles and light trucks)";
 - (3) by striking subsection (b) and inserting the following:
 - "(b) STANDARDS FOR PASSENGER AUTOMOBILES AND LIGHT TRUCKS.-
- "(1) IN GENERAL.- The Secretary of Transportation, after consultation with

the Administrator of the Environmental Protection Agency, shall prescribe average fuel economy standards for passenger automobiles and light trucks manufactured by a manufacturer in each model year beginning with model year

in order to achieve a combined average fuel economy standard for passenger automobiles and light trucks for model year 2013 of at least 35 miles per gallon.

- "(2) ANNUAL PROGRESS TOWARD STANDARD REQUIRED. In prescribing average fuel economy standards under paragraph (1), the Secretary shall prescribe appropriate annual fuel economy standard increases for passenger automobiles and
- light trucks that-
- "(A) increase the applicable average fuel economy standard ratably over the $% \left(\left(\left(\left(A\right) \right) -\left(\left(\left(\left(A\right) \right) \right) \right) \right) \right) =0$
- 9 model-year period beginning with model year 2005 and ending with model year 2013;
 - "(B) require that each manufacturer achieve-
- $\hbox{\tt "(i)}$ a fuel economy standard for passenger automobiles manufactured by that
- manufacturer of at least 33.2 miles per gallon no later than model year 2010; and
- "(ii) a fuel economy standard for light trucks manufactured by that manufacturer of at least 26.3 miles per gallon no later than model year 2010;

and

- $\mbox{"(C)}$ for any model year within that 9 model-year period does not result in
- an average fuel economy standard lower than-
 - "(i) 27.5 miles per gallon for passenger automobiles; or
 - "(ii) 20.7 miles per gallon for light duty trucks.
- "(3) DEADLINE FOR REGULATIONS. The Secretary shall promulgate the regulations required by paragraphs (1) and (2) in final form no later than 18 months after the date of enactment of the Energy Policy Act of 2002.
- "(4) DEFAULT STANDARDS.- If the Secretary fails to meet the requirement of

paragraph (3), the average fuel economy standard for passenger automobiles and

light trucks manufactured by a manufacturer in each model year beginning with model year 2005 is the average fuel economy standard set forth in the following $\frac{1}{2}$

tables:

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"2005
                28 miles per gallon
"2006
                28.5 miles per gallon
"2007
                30 miles per gallon
"2008
                31 miles per gallon
"2009
                32.5 miles per gallon
"2010
                34 miles per gallon
"2011
                35 miles per gallon
"2012
                36.5 miles per gallon
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"2013 and thereafter 38.3 miles per gallon

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"2005
                21.5 miles per gallon
"2006
                22.5 miles per gallon
"2007
                23.5 miles per gallon
                24.5 miles per gallon
"2008
"2009
                26 miles per gallon
"2010
                27.5 miles per gallon
"2011
                29.5 miles per gallon
"2012
                31 miles per gallon
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"2013 and thereafter 32 miles per gallon

"(5) COMBINED STANDARD FOR MODEL YEARS AFTER MODEL YEAR 2010.- Unless the $\,$

default standards under paragraph (4) are in effect, for model years after model

year 2010, the Secretary may by rulemaking establish-

"(A) separate average fuel economy standards for passenger automobiles and $\ensuremath{\mathsf{S}}$

light trucks manufactured by a manufacturer; or

"(B) a combined average fuel economy standard for passenger automobiles and

light trucks manufactured by a manufacturer.";

- (4) by striking "the standard" in subsection (c)(1) and inserting "a standard";
 - (5) by striking the first and last sentences of subsection (c)(2); and
- (6) by striking "(and submit the amendment to Congress when required under

- subsection (c)(2) of this section)" in subsection (g).
 - (b) DEFINITION OF LIGHT TRUCKS.-
- (1) IN GENERAL.-- Section 32901(a) of title 49, United States Code, is amended by adding at the end the following:
- "(A) is manufactured primarily for transporting not more than 10 individuals;
 - "(B) is rated at not more than 10,000 pounds gross vehicle weight;
 - "(C) is not a passenger automobile; and
- "(D) does not fall within the exceptions from the definition of 'medium duty passenger vehicle' under section 86.1803-01 of title 40, Code of Federal Regulations.".
 - (2) DEADLINE FOR REGULATIONS.- The Secretary of Transportation-
- (A) shall issue proposed regulations implementing the amendment made by paragraph (1) not later than 1 year after the date of the enactment of this Act;
 and
- (B) shall issue final regulations implementing the amendment not later than
- 18 months after the date of the enactment of this Act.
- (3) EFFECTIVE DATE.- Regulations prescribed under paragraph (1) shall apply beginning with model year 2007.
- (c) APPLICABILITY OF EXISTING STANDARDS. This section does not affect the application of section 32902 of title 49, United States Code, to passenger automobiles or non-passenger automobiles manufactured before model year 2005.
- (d) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the Secretary of Transportation to carry out the provisions of
- chapter 329 of title 49, United States Code, \$25,000,000 for each of fiscal years 2003 through 2015.